Click Here, to access updated CSB on GCOS 7-V10 TS 9870 web_site.

CUSTOMER SERVICE BULLETIN

DPS 7000/XTA

GCOS 7-V10

TS 9870

GCOS 7 SUPPORT

***** NOVEMBER 2001** ***

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1 Introduction

1.1 SCOPE OF THIS CUSTOMER SERVICE BULLETIN

This Customer Service Bulletin introduces the First Technical Status of GCOS 7-V10 for DPS 7000/XTA sites identified as TS 9870.

1.2 PRESENTATION OF THE CUSTOMER SERVICE BULLETIN (CSB)

This CSB contains the following sections:

- INSTALLATION RULES OF GCOS 7-V10 TS 9870:
  How to update your system with GCOS 7-V10 Technical Status 9870.

- REMINDER ON CHANGES INTRODUCED BY GCOS 7-V9 and INCLUDED IN GCOS 7-V10

- VISIBILITY CHANGES INTRODUCED BY GCOS 7-V10 TS 9870:
  What needs to be changed when you upgrade your system from GCOS 7-V9 TS 9866 to GCOS 7-V10 TS 9870.

- NEW PRODUCTS:
  Brief description of the new products or main new facilities introduced by GCOS 7-V10 TS 9870.

- IMPROVEMENTS IN EXISTING PRODUCTS:
  Brief description of the improvements included in GCOS 7-V10 TS 9870.

- OBSOLETE PRODUCTS OR FUNCTIONS

- DOCUMENTATION:
  List of documents impacted by GCOS 7-V10 TS 9870.

- GCOS 7-V10 TS 9870 SYSTEM ENVIRONMENT:
  Supported Technical Statuses of GCOS 7 Releases,
  Technical Statuses for firmware and OLTD,
  Technical status of GSF,
  Technical statuses of Mainway2000 supported by GCOS 7-V10 TS 9870,
  Versions of Interoperability Products supported by GCOS 7-V10 TS 9870.

Refer to GCOS 7 documentation for more details on information presented in this Customer Service Bulletin.

1.3 NOTICE

The section VISIBILITY CHANGES INTRODUCED BY GCOS 7-V10 TS 9870 presents the visibility changes brought by GCOS 7-V10 TS 9870 compared to the previous Technical Status available on the range of machines on which GCOS 7 runs currently .
It must always be read to avoid problems when moving to GCOS 7-V10 TS 9870 .

For any visibility changes in respect of older GCOS 7 Releases, refer to BULL EXPERT CENTER expertise.

1.4 PREVIOUS VERSIONS OF THE CSB

This is the first Customer Service Bulletin for GCOS 7-V10 Release.

For information, the previous versions of the CSBs related to GCOS 7-V8 Release are:

CSB for GCOS 7-V8 TS 8560 UP21	Reference N° 97-019 dated December 1997 (1)
CSB for GCOS 7-V8 TS 8560 UP30	Reference N° 98-005 dated January 1998 (1)

(1) No more supported

And those related to GCOS 7-V9 Release are:

CSB for GCOS 7-V9 TS 9662 UP30	Reference N° 99-004 dated May 1999 (2)
CSB for GCOS 7-V9 TS 9764 UP20	Reference N° 99-032 dated December 1999
CSB for GCOS 7-V9 TS 9866 UP20	Reference N° 00-018 dated December 2000

(2) End of support September 30, 2001

2 Installation rules of GCOS 7-V10 TS 9870

GCOS 7-V10 TS 9870
supports only the following DPS 7000 models

- *DPS 7000/XTA20*
- *DPS 7000/XTA30*
- *DPS 7000/XTA40*
- *DPS 7000/XTA50*
- *DPS 7000/XTA60*
- *DPS 7000/XTA70*
- *DPS 7000/XTA140*
- *DPS 7000/XTA150*
- *DPS 7000/XTA160*
- *DPS 7000/XTA170*
- *DPS 7000/XTA180*

Running GCOS 7-V10 from the minimal bootstrap disk customer may build a new P-SET or level (update) a restored P-SET at GCOS 7-V8 TS 8560 or GCOS 7-V9 level.

A new Software validation key reflecting the new GCOS 7-XTA installed products must be provided including all the ordered Marketing Identifiers.

The target updated system must be at least at technical status GCOS 7-V8 TS 8560 but it is strongly recommended when it is feasible to update it first on the origin platform to GCOS 7-V9 TS 9866 UP20.

2.1 GENERAL

The DPS 7000/XTA platform is shipped with:

- WINDOWS™ 2000 Advanced Server (English version) with Client Access for local or LAN remote administrators and operators.
- The Virtual machine V7000 with client Access for Terminal-Service ,2 of them reserved for BULL usage (Remote maintenance and first RSC offer).
- Peripheral drivers and software products under WINDOWS™ 2000 Advanced Server .

  (Refer to the manual “System Operator’s Guide” Ref. 47A2 53US Rev03 paragraph 2.5.4).
- A minimal GCOS 7 Bootstrap Disk.

The customer makes the configuration of the right version of V7000 Virtual Machine with the help of BULL services, (configuration of users, administrators group, operators group, access rights, GCOS 7 DISKs preparation,..)
the customer running the GCOS 7 Bootstrap system must then :

- either restore by VOLREST his original GCOS 7-V8 or GCOS 7-V9 production set followed by :

  a R to P LEVEL using the minimal GCOS 7 Bootstrap disk as an R-SET
  or an UPDATE-GCOS using the TS-media G98701 (don’t use an RP configuration with the minimal GCOS 7 bootstrap disk as an R-SET since a P to R LEVEL is done in that case).
- or build a P-Set using GIUF BUILDP command with the minimal GCOS 7 bootstrap disk as an R-SET and use of CPSITE for SITE.CATALOG,SYS.URCINIT,..
- Initialize GCOS 7 from the new P-SET ,validate the global Marketting Identifiers Key and install the Interoperability products from the delivered CD-ROM (for WINDOWS™ 2000 running products) and the delivered cartridge. (for GCOS 7 running products)

Be aware that you must at this time delete <open7.dir>.*, SI7.*, and SYS.DCM.SYSTEM files and adapt if necessary your SYSTEM startup. (Refer to manual “Interop7 User’s Guide 47A2 91US”).

- Install the FW domain from the BSR D1.011
- Level the GSF domain from the Minimal Bootstrap Disk
- Level or Install the DSA domain
- The OLTD domain is not used actually

In an R/P configuration, the Technical Status is installed by UPDATE-GCOS on the P-Set. The R-Set is updated to the same patch level as the P-Set by a LEVEL operation at the beginning of the Technical Status application, and before applying the new Technical Status on the P-Set.

In a P2/P configuration, the Technical Status may be installed on any Set (running or non-running). The default is the non-running Set. The other set may be updated later using the LEVEL command of GIUF.

(Refer to the manual "GCOS 7 System Installation Configuration and Updating Guide" Ref. 47 A2 23US Rev. 03 Chapter 7).

In a PO configuration (P-Only), it is advisable to save the system disks regularly, and in any event immediately before applying a Technical Status. The minimal GCOS 7 Bootstrap Disk must be protected as it can be used to initialize GCOS 7 and recover by VOLREST the Production set after a disk destruction.

WARNING:

The IUF functions BUILDP, BUILDP2, LEVEL, UPDATE_GCOS and RESTORE_SET are split into two jobs (2 XRONs). This is because they exceed the 256 steps limit allowed for a JCL member. Remember to release the outputs for both XRONs.

2.2 UPDATING PROCEDURE

When the TS is installed on the running system disk, it is strongly recommended that no other job be running during the execution of UPDATE_GCOS to avoid system conflict.

Delivery of the "CLEAN" versions of updated source components requires a check of whether the patches applied on the site for these components since the last Technical Status have been included or not in the version introduced by the present TS.

A special utility called "DETECT_SITE" delivered on the Technical Status media must be run before applying the Technical Status itself.

DETECT_SITE uses a reference list to check if the site patches have been cleaned in the new TS and produces a list of them (LIST-1).

For patches that have not been cleaned, "DETECT_SITE" searches in a correspondence list the appropriate patch to correct the problem under the new version, and puts it in a subfile from the PATCH-MEDIA; the content of this subfile will be applied later on by UPDATE_GCOS on the new TS.

DETECT_SITE also outputs this subfile patches number as LIST-2.

If it does not find a corresponding patch, it produces a list (LIST-3). However some H_NUCLEUS site patches are listed in LIST 3 while already cleaned (it is due to internal nucleus software unit in producer data base not handled by DETECT_SITE). In the Annex 1 are listed by Technical Status to update the corresponding nucleus site patches, a blank cell means that the SER is included in source or as a Reference or Interim SER included in Technical Status delivery.

You must ask your Bull Support Center for the other missing patches specified in LIST-3.

(See below for running "DETECT_SITE").

The contents of the PATCH-MEDIA are periodically updated, therefore it is advisable to use the most recent version before applying the GCOS 7-V10 Technical Status. Ask your Bull Support Center to provide it.

Bull S.A.'s responsibility cannot be involved in case of regression resulting from non-execution of the job DETECT_SITE.

You are also advised to contact your Bull Support Center before installation to check if any additional corrections have to be applied on the new Technical Status. This is to insure correct behaviour.

2.2.1 Running the DETECT_SITE Utility

If you have not received the "PATCH-MEDIA" with your "TS-MEDIA", you must still run DETECT_SITE, but without entering the INVOL2 information.

All SITE patches that have not been cleaned in the new TS will appear in the LIST-3 produced by DETECT_SITE. Please contact your Bull Support Center in order to get the missing patches.

1. Log on to IOF as a user of the SYSADMIN project,
2. Start GIUF:

   S: **GIUF**

3. Then run DETECT_SITE:

   G: **{DETECT_SITE | DTST}**
   INVOL1=G98701:{ MT|CT|CT/M5|CT/M6|CT/LIB|CT/36T|CT/LIB/36T }
   [INVOL2=DTxxx:{ MT|CT|CT/M5|CT/M6|CT/LIB|CT/36T|CT/LIB/36T }]
   [DISPLAY=1]]

   (if DISPLAY=1 is specified a report is produced on the submitting console)

Carefully read paragraphs 2.2.2 to 2.2.11 before starting the Technical Status installation.

2.2.2 Prerequisites

If your running GCOS 7 system is at Technical Status GCOS 7-V7 TS 7356 or at a previous one you have to update first your system at least to GCOS 7-V8 TS 8560 and preferably to GCOS 7-V9 TS 9866 on the DPS7000/nonXTA if you want to use it for GCOS 7-V10 TS 9870 installation on the DPS7000/XTA .

2.2.3 Installing the Technical Status

1. Log on to IOF as a user of the SYSADMIN project.
2. Check that H_SCANNER, H_EXECUTE and H_WRITER modules are preinitialized. If these modules are not preinitialized, issue MDC PLM=H_SCANNER, MDC PLM=H_EXECUTE and MDC PLM = H_WRITER commands at the main console.
3. The preinitialization of these modules is mandatory to insure a good execution and the edition of the result of the UPDATE_GCOS command.
4. Check that temporary space is available either on resident disks if site VOLSET is not active or on disks declared as containing temporary files if site VOLSET is active.The size of the temporary space required is about 8 Mbytes.

   Then enter:

   S: **GIUF**

5. Enter the UPDATE_GCOS function of GIUF (alias UPDG) at the G: prompt

   Using one tape or cartridge as input:

   G: **UPDG INVOL=G98701:{ MT|CT|CT/M5|CT/M6|CT/LIB|CT/36T|CT/LIB/36T }
   [OUTSET={P|R|P2}];**

   Using several tapes or cartridges as input (refer to "GCOS 7 System Installation Configuration and Updating Guide" Ref. 47 A2 23US Rev. 03 Chapter 7):

   G: **UPDG INVOL=G98701/G98702:{MT|CT|CT/M5|CT/M6|CT/LIB|CT/36T|CT/LIB/36T}
   [OUTSET={P|R|P2}];**

WARNING - WARNING - WARNING - WARNING - WARNING - WARNING - WARNING
****
Completion of the installation job is notified on the Operator console. This message invites you to validate the provided GCOS 7-XTA software validation key BEFORE terminating the current GCOS 7 session. It is imperative that this be done otherwise you will loose all your Marketing Identifiers when restarting GCOS 7 .

2.2.4 Checking Transferred Patches

Carefully read the OUTPUT of the first job of UPDATE_GCOS of GCOS 7-V10 TS 9870 installation to find any patches with the following message in "LIST OF NOT TRANSFERRED SER'S":

"PATCH HAS SYMB V U I=REF, REAPPLY SOURCE PATCH WITH INSST"

If such patches exist, they must be manually re-applied by means of the GIUF PATCH_HLMLIB function (alias PATLM).

2.2.5 Corrections

If necessary, apply any recommended additional patches, mainly the corrections which **may be** delivered with the Technical Status update kit (AFT870 media). If you update your system from GCOS 7-V9 TS 9662, (or GCOS 7-V9 TS 9764) please delete the SER P7222 (or SER P8104) to avoid conflict or erroneous patches AFTxx identification in the Sysout banners.

2.2.6 INIT of the System

After installation of the GCOS 7-V10 TS 9870, an **INIT** of the system is **mandatory.** Make sure that your GCOS 7-XTA software validation key has been **validated** followed by system **CONFIG** completion before Re-initializing your system.

2.2.7 Restarting the System

1. In order to validate the new Technical Status, it is **mandatory** to perform an ISL with:

   RESTORE,RESTART(CLEAN),[NSYSSTUP]

   NSYSSTUP option must be used if any telecommunication activity is generated in system startup (like SOW spool launching).

2. Answer **N** (no) to the NG03 question:

   "NG03 DO YOU WANT TO LOAD PREVIOUSLY SAVED TELECOMMUNICATION CONFIGURATIONS ? (Y,N), DEFAULT=Y"

3. At question OU16:

   "SYS.OUT RECOVER?"

   the answer can be Y (Yes) or N (No).

4. After GCOS READY, it is **mandatory** to execute a CRNETGEN (basic and incremental).

5. If the RESTORE of the system has been executed with NSYSSTUP option, it is necessary to run the STARTUP system manually.

   As the CLEAN part of the SYSTEM startup is executed when the value of the third switch is equal to 1, set the value of this switch to 1 by the command:

   SET_SWITCH SWITCH2=1

   and execute the command:

   AI SYSTEM LIB=SITE.STARTUP

2.2.8 CLX and Interop7

If the product CLX is installed on the updated system, you must re-install it after installation of GCOS 7-V10 TS 9870. In fact it is necessary to install all needed INTEROP7 products at this time.
(Refer to INTEROP7User's Guide ..... 47 A2 91US Rev. 00)

2.2.9 SECUR'ACCESS

After GCOS 7-V10 TS 9870 installation, you must do the following:

1. When using version V3.3 (or later) of SECUR'ACCESS, copy the members SA7VL and SA7_MBXNAME from the library SA7.LIV.SL to the library SYS.HSLLIB.

   S: **LMN SL LIB=SYS.HSLLIB;**
   C: **IL1 SA7.LIV.SL;**
   C: **MOVE SA7VL INLIB1;**
   C: **MOVE SA7_MBXNAME INLIB1, INFORM=SARF, OUTFORM=SARF;**
   C: **QUIT;**

2. Update the SM library H_SM_DUAL using the JCL SA7-SMDUAL in the SL library SA7.LIV.SL

   EJ SA7-SMDUAL,,SA7.LIV.SL

3. Update the library SYS.HBINLIB by transferring the security remote loading modules from SA7.LIV.BIN:

   S: **LMN BIN SYS.HBINLIB;**
   C: **IL1 SA7.LIV.BIN;**
   C: **MV *SECUR* IL1;**
   C: **QUIT;**
   (To be performed only in case of Smartcards usage)

4. Apply the specific corrections necessary to SECUR'ACCESS (contact your Bull Support Center).

5. Perform an ISL RESTORE session of your system.

2.2.10 RDDF 7-V2

GCOS 7-V10 TS 9870 is delivered with RDDF7 V2.3 which supports ORACLE Version 7.3.4 (Year2000 ready). Contact your BULL Service Center for migration of RDDF7-V2.1 ,with ORACLE V6 usage, towards RDDF7-V2.3 with ORACLE V7 usage..

2.2.11 Restarting Production

Before restarting production carefully read the section VISIBILITY CHANGES INTRODUCED BY GCOS 7-V10 TS 9870.

1. TDS/GTWriter

   After the application of any Technical Status, you must regenerate all your TDSs (TP7GEN) and GTWriter (TWGEN) before using them.

2. MML

   After the application of any Technical Status, you must regenerate your MML application (MMLGEN) before using it (Note that in text mode MML uses ASCII translation tables).

3. TWCOMM

   When restarting TWCOMM for the first time after the TS application, the value "CLEAN" must be used for the first parameter.

2.3 TECHNICAL STATUS DOCUMENTATION

The documentation which describes the contents of the Technical Status is automatically printed at the end of installation. However, it can be printed at any time by submitting the following JCL:

Using tape or cartridge as input:

S: **MNLIB SL INFILE=SYS.IUF:G98701:{MT|CT|CT/M5|CT/M6|CT/LIB|CT/36T|CT/LIB/36T}$MFT**
COMMAND='PRINT INFILE:IUF_DOCTS'

IUF_DOCTS can also be printed from the SYS.IUF library on disk, after installing the Technical Status.

On the TS tape or cartridge, there is also a file "DOC_9870" which contains the same information as IUF_DOCTS and in addition the list of SYS.GPL.MACLIB, SYS.HBINLIB, SYS.HCULIB, SYS.HELP, SYS.HLMLIB, SYS.HSLLIB, SYS.IUF, SYS.SYSTEM files and the list of patches included in GCOS 7-V10 TS 9870. It can be printed using one of the following commands, depending on the type and number of media on which the Technical Status is delivered:

One tape or cartridge:

S: **DPRINT INFILE=DOC_9870:G98701:{MT|CT|CT/M5|CT/M6|CT/LIB|CT/36T|CT/LIB/36T}$MFT**

Several tapes or cartridges:

S: **DPRINT INFILE=DOC_9870:G9870x:{MT|CT|CT/M5|CT/M6|CT/LIB|CT/36T|CT/LIB/36T}$MFT**

where "x" (in general = 2) is the number of the last media.

2.4 DISK SPACE OCCUPANCY

The minimum disk space occupancy on FSA volumes found after an INSTALL_ALL of the GCOS, DSA, FW, OLTD, and GSF Domains is the same as in GCOS 7-V8 TS 8560 and in GCOS 7-V9 TS 9662 / 9764 / 9866 and is approximately equal to 900 Mbytes.

2.5 IDENTIFICATION OF GCOS 7-V10 TS 9870 IN THE BANNERS

A given Technical Status may have several update levels. The level of update is referred as UPxx. This level is displayed in the different banners of GCOS 7-V10 TS 9870. The banner printed out in the SYSOUT is as follows:

KA15 V10 9870 SM: 9870 LM:9870 FW: D024 90029001 PR/H136

The banner received on an IOF connection to GCOS 7-V10 TS 9870 looks like:

>>>16:18 IOF-KA15 V10 SYS: 9870 SM: UP10 LM: 9870 FW: D024

3 Reminder on Visibility changes introduced by GCOS 7-V9 and included in GCOS 7-V10

The visibility changes presented in this section include the changes that you must take care of when installing the new technical status so that the current running operations are not disrupted. It does not cover neither the new functions nor the modifications in the different output displays.

3.1 VISIBILITY CHANGES INTRODUCED BY GCOS 7-V9 TS 9662

3.1.1 JOB MANAGEMENT

3.1.1.1 JOR Printing requests

Printing of Job Occurrence Reports is now limited to the users for whom the Jobs have been submitted except if theses users are SYSADMIN project users or they have the MAIN Operator attributes. Requests to print JOR belonging to another user will be rejected with the message:

PRINTJOR: ILLEGAL ACCESS TO JOR

3.1.1.2 RESOURCE MANAGEMENT

Print out on the Operator console of new Automatic Resource Manager (ARM) messages when significant transitions in resource usage by the system are reached.

AR12 WARNING: SYSTEM ENTERS NORMAL USE
AR12 SYSTEM BECOMES UNDERUSED

Over use of the system is already notified to the operator through the enter thrashing mode message.

(Refer to: "ARM User's Guide Ref. 47 A2 11US Rev. 04)

3.1.2 TDS

3.1.2.1 TDS Statistics

The statistic data generated by a TDS session are now kept after the restart of this TDS with the option REPEAT YES. This applies only if a private SYSOUT is assigned for this TDS and when this restart follows an abnormal termination of the TDS.

3.1.2.2 TDS Status Display

When a TDS is protected by SECUR'ACCESS the command DTSTAT is authorized only to users with the SYSADMIN access rights. Other users using this command will receive common statistics followed by the message:

NO MORE INFORMATION DISPLAYED: SECUR'ACCESS IS ACTIVE

3.1.2.3 CLOSE_TDS_FILE Command

If a file for which a request to keep the currencies has been issued (CALL " KEEP-CURRENCIES) is closed by the TDS Master Operator after the end of the current commitment, the next commitment will not be allowed and the transaction will be aborted with the return code IFNERR.

3.1.2.4 USE M-TX-ABORT-ON-BREAK Generation clause

A new clause USE M-TX-ABORT-ON-BREAK may be specified in the TDS Section of the TDS generation statements.
When specified, this clause will cause the current Master Transaction to be aborted upon reception of a break entered by the master operator. The break transaction if any will not be activated.
If no master transaction is running when the break is entered, then the break transaction is activated.
The purpose of this feature is mainly to allow for the termination of Master transactions waiting for a long time the release of locked resources to end.

3.2 VISIBILITY CHANGES INTRODUCED BY GCOS 7-V9 TS 9764

3.2.1 Printing Messages "DATE" in a JOR

Several user's JOB (TDS, automaton,...) or system's JOB (TNS, FEPS, RDDF7, OPEN7, DYNSAVE server,...) can run during several days without interruption. But after termination, when the JOR is printed, it is very difficult (and sometime impossible) to find correct sending date of the messages. A message "DATE" (a message like "ISSUED ON SEPT 25, 1999") is printed on JOR for each new day, like in an IOF mailbox.

3.2.2 DATE of PLM

The GCL command “DC PLM = * “ will give the date of PLM for each Load Module displayed:

Example:

```
16.38 DLM   H_COBOL85/SYS.HLMLIB/P-7662/CAT = 644 PAGES  99/09/22
      DLM   H_LINKER/SYS.HLMLIB/P-7662/CAT = 217 PAGES  99/09/22
      DLM   H_IOF/SYS.HLMLIB/P-7662/CAT = 52 PAGES  99/09/22
      DLM   H_WRITER/SYS.HLMLIB/P-7662/CAT = 60 PAGES  99/09/22
      DLM   H_RUN/SYS.HLMLIB/P-7662/CAT = 56 PAGES  99/09/22
      DLM   H_CATALOG/SYS.HLMLIB/P-7662/CAT = 67 PAGES  99/09/22
      DLM   H_EXECUTE/SYS.HLMLIB/P-7662/CAT = 112 PAGES  99/09/22
      DLM   H_UTILITY/SYS.HLMLIB/P-7662/CAT = 56 PAGES  99/09/22
      DLM            8 PREINITIALIZED LOAD MODULES
```

3.2.3 DYNAMIC Files Save

A message is printed on the Dynamic Save Server JOR , showing the date and time at the beginning of each dynamic save:

```
JP37 SYS: TSU.PIUVRIDX
 SAVE DATE RECORDED IN THE JAS IS 16:47:18.704 SEP 23, 1999
```

3.3 VISIBILITY CHANGES INTRODUCED BY GCOS 7-V9 TS 9866 UP20

3.3.1 GCL COMMAND MDLD CLASSLIST PARAMETER

In the manual SYSTEM OPERATOR'S GUIDE 47A2 53US Rev.03 page 8-46 the PARAMETER CLASSLIST (or CLASS) syntax is changed to .

SYNTAX

```
[ [ CLASSLIST]          [aa [-aa] ]
[ [          ]    =
[ [CLASS     ]          [aa       ]
```

PARAMETER

The default value CLASSLIST=* is no more assumed, the USER must specify the JOB class or classes whose attributes he want to modify.
This change prevents from modifying all classes by mistake.

3.3.2 OCS DRIVER LOAD MODULES

The following load_modules have been renamed :

H_NCCD7	is renamed	H_VCPD7
H_NCC_EDTRACE	is renamed	H_VCP_EDTRACE
H_VERIFYNCC	is renamed	H_VCP_VERIFY

The new names appear on some display commands (as Display_JOB, Display_Configuration), and these new names have to be used in the GCL command Modify_Configuration in the keywords PLM or CLM

3.4 NEW PRODUCTS OF GCOS 7-V9 TS 9662

The use of some of these new functions is subject to the installation of the associated Marketing Identifiers (MI).

3.4.1 TDS-Web

GCOS 7-V9 brings the support of the new Transactional offer which allows for developing transactions able to converse with universal HTML presentation end-user stations. These stations access the GCOS 7 Transactional application using a standard browser connected to the INTERNET or an INTRANET network.

Note that the conversion HTTP/DSA protocol is achieved by a HTTP/DSA Gateway located in a MAINWAY Communication processor.

The main features of the TDS-Web component are:

A set of HELPER Routines which may be used to process HTTP requests and answers in the user transactions

An IDS/II Database which stores all the HTML pages used in the user transactions (HTML Template Database)

A batch utility and a service transaction which is to be used to load the HTML Template Database created by a standard HTML Editor

The HTML Transactions may be mixed in an existing Transactional Application or included in a dedicated TDS-Web Transactional application. This latter case is mandatory if you want this application to execute in the TDS_WEB function attached to particular privileged execution domain (a dedicated processor).

A dedicated TDS-Web transactional application is generated by the addition of a:

USE TDS-SPECIALIZED-WEB7 clause in the TP7GEN generation utility.

In this case only access from a browser will be allowed. All other connection attempt will be rejected (except Master connection).

This product requires the Marketing Identifier TPDD026 to be validated on the system. There is no need of the DBM/II Data Base Manager (IDS/II) to be ordered.

Usage of the product including the application programmatic are fully described in the "TDS-Web for GCOS 7 User's Guide" manual.

(Refer to: "TDS-Web for GCOS 7 User's Guide Ref. 47 A2 39UT Rev. 01)

3.4.2 Support of the EURO character

GCOS 7-V9 from TS 9662 includes all modifications to insure a correct processing of the EURO character. This covers the translation from and to the out of GCOS 7 world into internal EBCDIC code and the correct transportation through all components of GCOS 7 of this character.

3.4.2.1 EURO character codification

It is assumed that the ASCII representation of the EURO character follows the ISO 8859-15 (LATIN-9) standard defining the EURO character as the hexadecimal value "A4" (8-bit ASCII). The GCOS 7 internal representation follows the D.011 (DSA 111) Bull standard assigning the hexadecimal value "9F" to the EURO character representation.

3.4.2.2 Entering the EURO character

The input terminal (or Glink or Affinity emulator) must be adapted so that it is able to generate the EURO character. Check with your terminal provider the availability of this feature. Some GCOS 7 components offer the possibility to enter a character without a corresponding key on the keyboard by typing in a numeric representation of the character. For example in COBOL the EURO character can be entered either in hexadecimal format "9F" or in decimal format ("160").

3.4.2.3 Printing the EURO character

Depending on the printer type, it is necessary to establish a correspondence between the internal EURO character representation (EBCDIC "9F") and the position of the EURO character on the printing belt or belt image when it exists. Four KPRU images (EQ, ES, ER and ET) are delivered in the UREXT member of the SYS.HSLLIB library to replace the existing images (JQ, JS, JR and JT) when printing the EURO character on a PR900 type printer.

3.4.2.4 The CURRENCY SIGN COBOL Clause

The EURO character can be specified as any other character in this clause which gives the possibility to define a "CURRENCY SIGN" character which can be part a COBOL field description (PICTURE). If no EURO character is available on your keyboard to specify this character as the currency sign you can use the hexadecimal or the decimal representation. But when you want to include this character in a field description (PICTURE) you must use the text editor feature available to enter the hexadecimal representation of the character. With the GCOS 7 text editor (ED) you will have to type in PIC [X9FZZZ9.99 for example.

Information about the possibility to input or print out the EURO character with your material may be obtained by your Bull representative from the Marketing Assistance Center in Les Clayes-Sous-Bois.

3.5 NEW PRODUCTS OF GCOS 7-V9 TS 9866 UP20

The use of this new function is subject to the installation of the associated Marketing Identifier (MI).

3.5.1 XA- TDS

Use of TDS as a resources server, which communicates with a distributed transactional located on a WINDOWS™ station.
XA-TDS allows Windows™ applications running under MTS to synchronize updates both on open databases servers and GCOS 7 files and databases.
TDS transactions can take part in global distributed processing which are co-ordinated by the MTS transaction manager. TDS updates can be committed with other XA-compliant resource managers as ORACLE or SQL Server.

This product requires the Marketing Identifier TPDD042 to be validated on the running system.

Usage of the product including the application programmatic are fully described in the "XA-TDS User's Guide" manual.

(Refer to: "XA-TDS User's Guide Ref. 47 A2 40UT Rev. 00)

3.6 IMPROVEMENTS INTRODUCED IN GCOS 7-V9 TS 9662

3.6.1 CATALOG MANAGEMENT

3.6.1.1 Job class extension support

The catalog management has been improved to support the two characters job classes. A job always runs in a class which is one of the classes defined at system configuration time. These classes are identified by one or two alphanumerical characters ranging from A to Z and from AA to ZZ. Up to now specification of classes in the catalog to link projects to a given class (or list of classes) was restricted to one character class. This technical status brings the possibility to specify two characters classes in the CREATE_PROJECT (CRP), the MODIFY_PROJECT (MDP) and the LIST_PROJECT (LSP) commands of the MAINTAIN_CATALOG (CATMAINT) utility. The * character may be used in place of one alphanumerical character to specify any valid characters.

JOBCLASS = * is equivalent to JOBCLASS = (A,B, ...X,Y,Z)
JOBCLASS = *B is equivalent to JOBCLASS =(AB,BB,CB, ...,XB,YB,ZB)
JOBCLASS = (*,**) specifies all available classes from A to Z and from AA to ZZ

With this improvement, the number of job classes which may be specified in the catalog is increased from 26 to 702.

Remember that the first class specified in a CRP or MDP command is the default class of the project for batch jobs and the second class specified is the default class of the project for IOF jobs. If no explicit classes are defined for a project, the P class is the default for batch jobs and the Q class is the default for IOF jobs.

If two character classes are introduced in a catalog with TS 9662 this catalog remains usable with a previous Technical Status but only one character will be taken in account.

3.6.2 DUMP SAVE UTILITY IMPROVEMENTS

A new parameter (KEEP) has been implemented in the EXECUTE_DP_SAVE command (DP_SAVE, DPSV) to request that the JOR, LOG and binary dumps of OPEN7 be kept in the library at the end of the utility execution in the OPEN7_CRASH or the OTHER_PROBLEM context. It is therefore the responsibility of the system Administrator to avoid possible library overflows by deleting these objects.

3.6.3 FILE MANAGEMENT AND UTILITIES

3.6.3.1 DSL Extensions

The Data Service Language (DSL) which may be used in the logical level Data Management Utilities (CREATE, COMPARE, PRINT) to select and modify records from the input file depending on content of this files has been improved to extend its selection and modification capabilities.

- The DSL input deck can now include several RECORD paragraphs. As in the previous revisions, a RECORD paragraph may consist of a set of INCLUDE commands OR a set of OMIT commands AND one ARRANGE statement applying to the selected records. The possibility to have several RECORD paragraphs gives the ability to select and modify input records with different criteria on the same record fields. For example you can have a first RECORD paragraph with an INCLUDE statement selecting all records with the a value equal or greater than " 61 " in position 2 and 3 of the input record and generate an output record with the constant value " 19 " in position 2 and 3, followed by the end of the record. A second RECORD paragraph will select all records with a value smaller than " 61 " in position 2 and 3 and will generate a record with the value " 20 " in position 2 and 3.

  ```
  RECORD:
          INCLUDE = (2,2) GE ″61″
          ARRANGE = (1,1) , ″19″, (2,n)
  RECORD:
          INCLUDE = (2,2) LT ″61″
          ARRANGE = (1,1) , ″20″, (2,n)
  END:
  ```

  Though that these DSL extensions have been designed mainly to ease transformation of files requested by the Year 2000 event, their scope is obviously not limited to that.

- With the same objective the ARRANGE statement has been improved to support the possibility to add or subtract binary or decimal value in the specified fields: the following statement:

  ```
  ARRANGE = (10,2) ADD SBIN ‘1900’
  ```

  will add to all selected records the binary value ‘1900’ to the binary value of the two character field starting at the tenth character from the beginning on these records. A new type of data declaration has also been implemented to describe a decimal field in display mode (same as UDEC without a sign in the rightmost position).

- The possible size of the DSL input deck has been multiplied by two.

3.6.3.2 Multiple File Tape processing improvements

- The keyword " FORCE " has been implemented in the DELETE_EMPTY_MEDIA GCL command to ease the update of the SITE.MFT files in the following cases:

  When an 36-Tracks existing volume is formatted into an 18 Tracks volume.

  If a media has been modified on another system.

  The syntax becomes:

  { DELETE_EMPTY_MEDIA | DLMD }
  { MEDIA | MD } = volume-18ch
  [FORCE = { 0 | 1 }

- When a file deletion is requested with a CATONLY condition (DELETE_FILE or DELETE_FILESET) this status is recorded in the SITE.MFT. A new message indicates this status if a LS command is issued in the MNMFT processor: FILE HAS BEEN DELETED FROM CATALOG.

  The file is always accessible on the media (providing that the media has not been reformatted). It can be catalogued again manually and reused in READ or WRITE mode. The attribute " delete catonly " is only reset when the file is opened in OUTPUT or APPEND mode.

  If a file is not closed when the DLF CATONLY is performed, the relations are removed from the SITE.MFT file.

(Refer to: "MFT User's and Administrator's Guide Ref. 47 A2 38UF Rev. 02)

3.6.3.3 File Access Performance Improvement

The access mechanism to the Volume Table Of Content has been improved to reduce the time to access one file entry and to prevent the overhead introduced by access conflicts.

The elapsed time to read the VTOC of a volume containing 5000 files is divided by a factor ranging from 2.5 to 35 depending on its environment (shared or not shared) and the access contention.

3.6.3.4 File Access Information Availability

The display of catalogued files information has been improved to display information stored at the last OPEN of the file in OUTPUT mode by a COBOL program. These information are retrieved from the different clauses of the COBOL program. They are:

FILE ORGANIZATION
CODE SET & COLLATING SEQUENCE
PADDING CHARACTER or NO PADDING
MINIMUM & MAXIMUM RECORD SIZE
BLOCKSIZE & BLOCK SERIAL NUMBER (BSN)
FILE POSITION
RECORD FORMAT
RECORD DELIMITER
HEADER TYPE (SSF, SARF or ASA)
PRIMARY KEY SIZE and LOCATION
ALTERNATE KEYS NUMBER, SIZE and LOCATION
NAME OF THE LAST ACCESSING COBOL PROGRAM
DATE & TIME OF THE LAST OUTPUT OPEN OF THE FILE

These information are displayed by all utilities already displaying file information such as: LIST_FILE, LIST_CATALOG, LIST_FILESET, etc... whenever the CONTROL or ALL options are specified.

If the utility used is a catalog utility and an OUTFILE is specified, these information are stored in two new types of record in the specified output file. The GPL primitives H_DCOUTFCOB and H_DCOUTCOBX and their equivalent COBOL COPY members have been included in the system libraries.

Note that these information are updated only when the files are accessed by a COBOL program.

(Refer to: "Data Management Utilities" 47 A2 34UF Rev. 04)

3.6.4 FILE TRANSFER

3.6.4.1 Subfile DELETE parameter

It is possible to request the deletion of a subfile after the successful completion of its transfer via EFTR. This is achieved by adding the parameter " DELETE " in the ENTER_FILETRANS_REQ (EFTR), ENTER_LIBTRANS_REQ (ELTR), EXECUTE_FILE_TRANSFER (EXFT) commands or in the FILTFR JCL . Confirmation of the deletion will be asked if the CONFIRM parameter is active in the submitter user profile.

An additional byte has been taken from the RFU area of the programmatic interface structure to specify if the DELETE action is requested (1) or not (0) in case of COBOL file transfer request. (H_NP_USUBFT)

(Refer to: "UFT User's Guide Ref. 47 A2 13UC Rev. 06
"DJP User's Guide Ref. 47 A2 14UC Rev. 06)

3.6.5 GCL

3.6.5.1 #PAGETOP GCL VARIABLE

A new GCL variable has been implemented to control the skip to the top of the next screen generated by most of the File and Volume management Utilities. This variable #PAGETOP is managed through the profile command set (MODIFY_PROFILE and DISPLAY_PROFILE). File and Volume management utilities use this variable to generate or not skips to the next screen when they are used interactively. When set to 0 there will be no skip generated. When set to 1 (default value), skips to next screen will be generated as they are with TS 8560 and before. Note that some utilities which does not generate skip to next screen like LIST_FILE with CATONLY) are not impacted by this new variable.

3.6.5.2 GCL Commands display improvement

It is now possible to answer a prompt request with a question mark followed by an expression including strings of characters and asterisks to request the display of menus including all commands satisfying to the requested criteria. For example typing in: ?BUILD_* will return a displayed screen with:

```
BUILD_FCP_CONFIG .....
BUILD_FILE ..............
BUILD_LIBRARY............
BUILD_SYSTEM............
```

The full names of the commands only are searched, the ALIAS are not.

This is just an information menu - the displayed commands cannot be launched from this menu as it can be from the main menu.

This function is not available when NOVICE and MENU are set to 0. It is not available also with processors which manage their own commands (IQS and ED for example).

(Refer to: "IOF Terminal User's Reference Manual - Part 1 Ref. 47 A2 38UJ Rev. 03)

3.6.6 JOB MANAGEMENT IMPROVEMENTS

3.6.6.1 Display of assigned files

A new parameter has been added to the DISPLAY_ASSIGNED_FILES (DASGF) command to display the status of a file referred to by its External File Name (EFN). A new keyword - EFN - exclusive from the RON keyword may be used to display the list of the RON of the jobs which have assigned or consigned the file the EFN of which is specified.

The syntax of the modified command is:

```
{ DISPLAY_ASSIGNED_FILES }
{ DASGF                  }

        { RON = Xnnnn | EFN = { char44 } }

        [ { DETAILED }
          { DTLD     } = ( 0 | 1 ) ]
```

When RON parameter is specified a SYSADMIN or an OPERATOR user can use this command with any job. With all other projects a user has the visibility of his own jobs only. The command applies only to jobs in execution.
With the EFN parameter the command can only be used by a SYSADMIN or an OPERATOR user.

(Refer to: "IOF Terminal User's Reference Manual - Part 3 Ref. 47 A2 40UJ Rev. 03
"System Operator's Guide Ref. 47 A2 53US Rev. 03)

3.6.7 JOURNAL MANAGEMENT IMPROVEMENT

3.6.7.1 Multi-file ROLLFORWARD Extension

It is now possible to rollforward up to 99 files simultaneously. This possibility is offered only in JCL. The GCL command accepts only up to 25 files as in the previous Technical Status.
In JCL the command syntax is:

```
ROLLFWD OUTFILES = (efn1,efn2,.....efn99) [ BEGDATE ...];
```

If more than 99 files are specified, the JCL translation aborts with a "FATAL ILLEGAL KEYWORD" message.

3.6.8 MILLENNIUM APPLICATION TEST FACILITY

The former Marketing Identifiers UTSD024 (Millennium Application Test Facility), UTSD022 (Millennium Test Booster LR and UTSD023 (Millennium Test Booster HR) are now automatically validated with GCOS 7-V9.

3.6.8.1 Pre-Dating Feature

It is now possible to use the Millennium Application Test Facility with a date/hour lower than the current date/hour. This date/hour must be lower than at least 24 hours. The Display_Private_Timer command is modified consequently to display a " + " or " - " sign in front of the active date to reflect the fact that the date is posterior or anterior to the current date.

3.6.8.2 Parameters retention

The Millennium Application Test Facility parameterisation is kept from one GCOS 7 session to another one in case of a WARM or a COLD restart after a normal system shutdown or a system crash.

3.6.8.3 New error messages

Three new error messages have been introduced to reflect some error conditions in the VALIDATE_PRIVATE_TIMER command.

TM59 PRIVATE TIME MUST BE SUPERIOR THAN CURRENT TIME (MINIMUM 24+1 HOURS)
TM61 PRIVATE TIME MUST BE INFERIOR THAN CURRENT TIME (MINIMUM 24 HOURS)
TM62 ILLEGAL VALUE FOR DATE (If the new date is not between 01/01/1981 and 12/31/2060)

(Refer to: "How to deal with Year 2000 Ref. 47 A2 23UG Rev. 03)

3.6.9 TDS : Automatic Binding

A new TP7 Generation clause has been added to generate an automatic AUTOBIND statement in the TP7 linkage Step. This will cause all Compile Units to be bound in Type 2 segments up to 90% of a segment size (64K). This allows for reducing the number of segments necessary to hold the USE PROCEDURE declared in the TDS generation.

This clause is specified by including USE LINK-WITH-AUTOBIND statement.

To help you to know the number of Type 2 segments your TDS is using ask your Bull Customer Service representative.

3.6.10 VOLUME MANAGEMENT AND UTILITIES

3.6.10.1 VOLLIST , LIST_VOLUME FAST Option

A new keyword - FAST - is now available in VOLLIST JCL or in LIST_VOLUME GCL to run this utility without any opening of the files present on the volume or of the catalogs where these files are catalogued. This speeds up considerably the execution time when a limited amount of information is wanted.

If a command with this keyword is submitted on a system where the Access Rights are active and the submitter has not the SYSADMIN attribute the catalogued files will not be displayed.

The options CONTROL, SUBFILES and RATIO = LIB/ALL are refused or ignored.

The USAGE options gives only the information retrieved from the volume VTOC excluding all UFAS file specific information.

3.7 IMPROVEMENTS INTRODUCED IN GCOS 7-V9 TS 9764

3.7.1 GCOS 7 SOFTWARE MAINTENANCE

GCOS 7-V9 TS 9764 includes all standard GCOS 7 corrections delivered after TS 9662 delivery up to November 1999. These corrections are either included as source corrections or as patches. As stated in Chapter 2.2 the status of the updated system site corrections can be checked using the DETECT_SITE utility.

3.7.2 GPL PRIMITIVES

H_LOAD_FILE, H_COPY_FILE, H_SAVE_FILE, H_PRINT_FILE, H_RESTORE_FILE
These SDI GPL primitives are delivered clean for FDS7 usage.

3.7.3 Unified DSL for DATA MANAGEMENT UTILITIES and SORT / MERGE

- An HEXADECIMAL chain can be extended in DSL OMIT / INCLUDE commands to 256 bytes as in SORT / MERGE comfile.

- DISP data type can be now processed in Data Management Utilities comfile.

3.7.4 STATUS OF A SUBMITTED JOB

A new COBOL CALL “H_CBL_UJOBINFO” allows to know the state of a JOB submitted by CALL ”H_IN_UEJR” or CALL “H_IN_ISUBMIT”

New GPL primitives H_DC_JOBINFO and H_JOBINFO allow to know the state of a JOB submitted by the GPL primitive H_SUBMIT

3.7.5 NEW KEYWORD

3.7.5.1 EXCLUDE in JCL VOLLIST and in GCL LIST_VOLUME

Only the files whose name does not begin with the specified pattern are listed.

3.7.5.2 NCLEAR in JCL VOLREST , KEEPVTOC in GCL RESTORE_DISK

If a file exists on disk and on tape the file on disk is restored from the tape file.
If a file exists on tape and not on disk the file on disk is created from the tape file, Other disk files with no reference on tape remain not modified.

3.7.5.3 PRTFILE in JCL VOLREST,VOLSAVE and GCL RESTORE-DISK,SAVE_DISK

This keyword gives a chart of saved / restored files with their catalog state and information on successful or failed SAVE or RESTORE.

3.7.6 Display of redirected output gives its origin

When a SYSOUT report is directed from an IOF console on a system E, towards a receiver system R
(Command MO Xnnn DEST=R), a SERVER is launched on system R and the report is declared on system E 'OUTPUT COMPLETED ON SITE R'.
On system R the command “DO <Xnnnn> “ gives for redirected outputs the complementary information ***“USER=yyyyyyy ORG_SYST=xxxx*** , where USER is the owner of the output, and ORG_SYST is the name of the system where the output has been created

Example: system R is BCC9 , system E is BCC3 , output X255:2 created on BCC3 redirected to BCC9

```
BCC9: do jobname=server2 system=bcc9
   16.06 DO     STATION=BCC9
         DO    X400:4    R255_2   3 C PR WAIT  LINES=    256 PAGES=      8
BCC9: do x400:4
   16.06 DO    X400:4    R255_2   3 C PR WAIT  LINES=    256 PAGES=      8  USER
=TSU  ORG_SYST=BCC3   BCC9  DEVCLASS=PR/H136 MEDIA=I10000
```

3.7.7 OPTION FOR=LINE IN GCL LOG

The new value LINE for keyword FOR of GCL command LOG allows to get a concise IOF log. It can be useful if the IOF log is processed by program. The 39 characters of the header are suppressed giving for instance :

```
LO10      >>> LOG STARTED ON 991130 AT 14:55:52 FOR X7455
S: DS EX
   SH14 X7455.2   EX IOF     SEBAG       Q         H_IOF

S: LOG TERM;
   LO09      <<< LOG TERMINATED FOR X7455
```

3.7.8 Different JAS use by Several TDS on protected site

Several TDS controlled by SECURACCESS can be protected by different JAS, some TDS working with JAS SYS and other with either JAS BLUE or JAS GREEN.

More generally several TDS working with different JAS can share a file protected by the BEFORE journal only and not catalogued with the JOURNAL=BOTH option.

3.7.9 TDS-Web

Access to the HTML pages IDS/II database from COBOL or C TPRs through the call of two routines:

H_WEB7_GET_HEADER and H_WEB7_GET_RECORD.

This extension makes easier the use of customer IDS/II database in a TDS-WEB application

A new GCL command WEB7_REORG_HTMLAREA allow to re-organise the database.

3.7.10 TDS TCP/IP

Spawning from or to a TDS TCP/IP correspondent is allowed. The correspondent must be connected.

The PASSTHRU functionality can be activated from a TDS TCP/IP correspondent.

TDS –TCP/IP client may supply a terminal identification which is controlled by the TDS application on the server side. DLL version 3.0.6 is the minimum version for this feature.

A TDS TCP/IP correspondent connection can be protected by SECUR'ACCESS .The Access Master authentication option is not supported.

The functions CALL SET-PASSIVE and CALL SET-ACTIVE are now supported

The TPCONNECT and TPRECV verbs can be protected by a TIMEOUT. DLL version 3.0.6 is the minimum version for this feature.

3.7.11 VCAM CONNECTIVITY

Improve the connectivity of VCAM up to 16000 sessions corresponding to four times 4000 VCAM sessions on a FCP7 controller.

3.8 IMPROVEMENTS INTRODUCED IN GCOS 7-V9 TS 9866 UP20

3.8.1 NEW KEYWORD ERASE OF GPL PRIMITIVE H_DEALLOC

The GPL primitive H_DEALLOC new keyword ERASE allows to reset to binary ZEROes the file disk space for security reasons (if this disk space is allocated to a new file it becomes not possible to display (by MAINTAIN_FILE,,) previous recorded DATA) .

3.8.2 Standard GPL primitives

3.8.2.1 H_TRTIME

This standard GPL primitive has been delivered to fix RC= SNDARERR bug since GCOS 7-V7 TS 7560.
This version is also immediately available on request to BULL support center for other GCOS 7 technical statuses.

3.8.2.2 H_BEGDEF

This standard GPL primitive is delivered for suppression of the release name at the beginning of the macro.

3.8.3 TDS – TCP/IP option DATACONVERT

A new option is given to manage ASCII – EBCDIC conversions in TDS TCP/IP.
It allows to specify at connection level whether the user's data must be converted or not.

3.8.4 TDS - TCP/IP FUNCTION BREAK

***** **BREAK** functionality:
A client application can send a BREAK to TDS by calling tpsend with the « H_BREAK » message.

If TDS get the turn in less than 2 minutes the BREAK transaction is started and the current transaction is interrupted.

If not the TDS-TCP/IP client is disconnected.

3.8.5 TDS – TCP/IP API for 3-tiers architecture with NT server

This improvement provides a 3-tiers architecture for TDS TCP/IP API with an intermediate NT server.
It concerns only the DLL TDS TCP/IP .

3.8.6 Improve TDS maximum declared transactions number

A TDS generation may declare up to 3000 transactions.

3.8.7 GCOS 7 GTWRITER support of 15000 declared terminals

The maximum number of pools was limited by the constraint that the total of pools and terminals declared may not exceed 3000 (Each pool must contain at least 2 and not more than 16 terminals).
This limit for GTWRITER generation is increased to 15000 allowing to declare in GTWRITER generation several time the same physical printer (with different access path,..)

4 Visibility changes introduced by GCOS 7-V10 TS 9870

The visibility changes presented in this section include the changes that you must take care of when installing the new technical status so that the current running operations are not disrupted. It does not cover neither the new functions nor the modifications in the different output displays.

4.1 CUSTOMER DATA MIGRATION

In this step1 exposure the GCOS 7 and INTEROP 7 system without any other native application is closed by recommendations. All the existing data is accessible and compatible (tape or cartridge) .
User applications under GCOS 7 are executable “AS IS” without any modifications.
There is a BULL service defined to help customers for their data migration (call your BULL Service Center)

4.1.1 Compatibility rules between former DPS 7000 and DPS 7000/XTA platforms

Disk Data format is not compatible between a disk subsystem connected to a former DPS 7000 platform and a disk subsystem connected to a DPS 7000/XTA platform, therefore it is not possible to share a GCOS disk volume between a former DPS 7000 platform and a DPS 7000/XTA platform.
To exchange data between a former DPS 7000 platform and a DPS 7000/XTA platform, use either tape or cartridge medias or telecommunication facilities.

4.1.2 User DATA BASE Evolution

Production must have been stopped when data base files are saved, in order to preserve data/index consistency.

IDS2 Databases

IDS2 files can be saved/restored using either GCOS 7 VOLSAVE/VOLREST option REORG or GCOS 7 FILSAVE/FILREST utilities.

Large UFAS Files

UFAS files can be saved/restored using either GCOS 7 VOLSAVE/VOLREST option REORG or GCOS 7 FILSAVE/FILREST utilities.

ORACLE Databases

If the ORACLE database is located on DPS 7000 GCOS 7, it can be saved/restored using either GCOS 7 VOLSAVE/VOLREST option REORG or GCOS 7 FILSAVE/FILREST utilities.
Customer can also take benefit of the DPS 7000/XTA evolution to re-organize or migrate the Oracle database.This can be done using EXPORT / IMPORT procedures of the Oracle software.
Refer to the Oracle documentation.

4.1.3 GCOS7 Disk File

A GCOS 7 volume is mapped onto a DPS 7000/XTA Windows™ 2000 file (in NTFS format).
After the file has been created, the contents of the corresponding GCOS 7 volume have to be restored using standard GCOS 7 utilities (VOLREST option REORG / FILREST).

The effective sizes of the XTA GCOS files are:

20971 * 100K for a XTA 2 GB file

41943 * 100K for a XTA 4 GB file

83886 * 100K for a XTA 8 GB file

94371 * 100K for a XTA 9 GB file (requires a disk with a minimum 18 GB physical size)

Important : In case of reconnection of 9Gb physical size disk,sizes listed above show that a 9Gb disk that is more than 95% full can not be restored on an DPS7000/XTA 8Gb file. The disk must be réorganized before it can be migrated.

4.1.4 Migration of System files

SITE.CATALOG, SYS.URCINIT, SITE.HELP, SITE.STARTUP, SITE.QUOTA,SITE.MFT must be migrated before the data migration operations start.

A special JCL called “UP_URCINIT” in SYS.HSLLIB can be used to re-insert in the User’s restored SYS.URCINIT the GCOS 7-V10 tables delivered for PR900 family printer with EURO sign support.

4.2 GCOS 7 SOLUTIONS SUPPORTED ON DPS 7000/XTA

4.2.1 Solutions not available in this step exposure

BI-SYSTEMS
COUPLED SYSTEMS
EXTENDED PROCESSORS BOOSTER FUNCTION
TDS-HA
AFFINITY under OPEN7
DDA and DDW
DPF7
DW7
EB7
EWEB7 replaced by GWEB
GMP7-AG
Mirror Disks (replaced by RAID1 hardware technology)
NATSTAR7
NFS7
OPEN7 JAVA virtual machine replaced by native JVM
XFORMS

4.2.2 Other Modified Interop7 solutions

CLX
CNDSA
DA7
ESP7
FTP7
OP7GW
OPENGTW
SOCKG7
SUBUX

4.2.3 Solutions available on NSPR request

GXRPC
ALLY on DPX
GXTI as an external API
RPC-SRVTDS
RPC-TOOLS
SA7 – ISM (UM – SA7)
SNMP7
SQL*NET via GXTI
TDS-TCP/IP via GXTI
FLOWBUS
MISTRAL
ORACLE7

4.2.4 Evolution of the Interoperability Solutions

Gateways which where previously on OPEN7 have been ported on Windows™.
All other gateways on GCOS 7, on UNIX, on Mainway, or on PC, are unchanged.
By the fact that some solutions (such as Telnet Server7) are no longer required on DPS 7000/XTA, only three gateways remain on Windows™:

- OpenGTW for Print
- FTP7
- NT7GW for ESP7, DA7, Java, Host Connect, Flowbus

Interop7 solutions for DPS 7000/XTA are the continuation of existing solutions on DPS 7000. There is no functional change for the user (and especially no modification in the TDS applications).
Only administrative tasks may be required:

- Install / configure the gateways,
- Regenerate TDS if you use the TCP/IP access of TDS for ESP, DA7, or Java to TDS solutions,
- Recode the OpenGTW scripts,
- Replace NFS7 UFAS access (if any) by the JUFAS access,
- Replace GXTI access to TCP/IP by SOCKG7 access to TCP/IP, if any,
- Modify the FTP scripts when they use the former #Gfile syntax
- Transfer OPEN7 scripts on an external UNIX server
- Replace user developments on Open7 (if any) by equivalent ones on NT.

4.2.5 OSI / DSA Solutions

The existing following Interop7 OSI/DSA solutions run unchanged on the new platform (through VCP7 and Mainway). See ISO/DSA Network and GCOS 7 DSA Applications.

The existing following Interop7 (OSI/DSA + TCP/IP) solutions run unchanged on the new platform (through VCP7 and Mainway). See ISO/DSA + TCP/IP Networks and GCOS 7 DSA Applications.

- AFFINITY/Viplet with Telnet server on Mainway, Unix, NT
- TDS-WEB with http-DSA gateway on Mainway

5 New products of GCOS 7-V10 TS 9870

The use of some of these new functions is subject to the installation of the associated Marketing Identifiers.

5.1 SUPPORT OF THE NEW DPS 7000/XTA MODELS

GCOS 7-V10 is specially adapted to support the new DPS 7000/XTA models. With these models the new architecture introduces the possibility for the two environments (GCOS 7 and OPEN) to evolve separately maintaining a very useful link between the both.

6 List of products or functions

If some MIs are not listed there, the rule to apply is the following one:
the product must not be visible in the GCOS 7 XTA catalog , but must be technically orderable through NSPR (case of old products without validation on GCOS 7 XTA but probably still running correctly).

The GCOS 7 XTA catalog includes the following MIs:
-yy00 is the group factor according to the platform, and -y000 is the option group according to the platform.

TASD006-yy00	GCOS7 XTA release V10
TASD007-0000	V7000 SOFTWARE MODULES
TASD008-yy00	GCOS7 XTA 3 Years License Fee
TASD009-yy00	GCOS7 XTA 4 Years License Fee
TASD010-yy00	GCOS7 XTA Monthly License Fee
TASD011-yy00	V7000 3 Years License Fee
TASD012-yy00	V7000 4 Years License Fee
TASD013-yy00	V7000 Monthly License Fee
MAND001-00C0	CD-DOC for GCOS7-EXMS (Documentation on CD)
MEDD002-0000	ISI7 Tape/Cartridge Media
MEDD003-0000	ISI7 CD-ROM media
SYSTEM FACILITY	
UTSD001-y000	SORT Extended
EXSD015-y000	GCL Batch
UTSD010-y000	UFAS Batch Booster
TPDD042-y000	TDS /MTS XA-GCOS 7 Support
TPDD046-WGC0	TDS /MTS XA-Windows Support
TPDD044-WPC0	TDS TCP/IP API-AIX Server&Workstation (L+M)
TPDD045-WG30	TDS TCP/IP API-W95/2000 Server&Workstation (L+M)
TPDD026-0000	TDS-Web
UTSD005-y000	CTSM Control Tool & Syst. Measurement
UTSD006-0000	SIM7 (Simul. of GCOS7 Operation required)
EXSD016-y000	EFM1 - Extended File Manager step 1
EXSD017-y000	EFM2 - Extended File Manager step 2
EXSD012-y000	CTL ACS4400 Support for UNIX Server *
EXSD010-y000	CTL WOLF Support for UNIX Server *
EXSD018-y000	GCOS7 CTL9710 support *
UTSD015-zA00	ACSLS/CTL9710 support 252 C
UTSD016-zA00	ACSLS upg. 252 =>420 cart.
UTSD015-zB00	ACSLS/CTL9710 support 420 C
UTSD016-zB00	ACSLS upg. 420 =>588 cart.

UTSD026-Q300	9740 ACSLS for 326 cart
UTSD027-Q500	9740 ACSLS Upgrade to 494 cart
UTSD026-Q500	9740 ACSLS for 494 cart
GMSD006-0000	36-Track Factory Support
GMSD008-0000	36-Track Support
UTSD025-000B	Opensave pack 5 agents serv.
UTSD028-000B	5 Open agents with Wese
TPDD025-y000	SNMP Agent 7
UTSD017-y000	Dynamic Save 7

SECUR'ACCESS V3

SECD001-y000	SECUR'ACCESS Basic Function
SECD003-y000	SA7 Password Entry
SECD005-y000	Evolution. V1/V2 SA7 Basic Function
SECD007-y000	Evolution. V1/V2 SA7 Password Entry

RDDF7

SESD001-y000	Remote Duplicate Data Facility
SESD002-y000	RDDF 7 Transfer & Remote Archiv.
SESD003-y000	RDDF 7 Remote Mirroring IDS/II
SESD004-y000	RDDF 7 Oracle option

SOFTWARE ENGINEERING

ADDD001-y000	SOFTWARE ENGINEERING package
DBDD001-y000	DBM II Data Base Manager
ADDD002-y000	IPCF Interact. Prog. Checkout Facility
TPDD002-y000	TPCF Transact. Prog. Checkout Facility
TPDD003-y000	XCP1 Distributed Transactional
TCPD001-y000	CPI-C/XCP2

STANDARD DEVEL. INTERF. (SDI)

CNHD012-y000	S.D.I. Package
CNHD003-y000	Telecom. Appl. Manager S.D.I.
ADDD003-y000	I.O.F. Application S.D.I.
ADDD004-y000	File Management Tools S.D.I.
ADDD005-y000	Automatic Operations S.D.I.
TPDD004-y000	T.D.S. Back-End S.D.I.
TPDD005-y000	T.D.S.-T.P.R. Dev. in G.P.L.
UTSD009-y000	Online OPEN-SBR S.D.I.

ASM 7 AUTOMATIC STORAGE MANAGEMENT

UTSD012-y000	ASM 7 Disk Storage Manager Basic Mode
UTSD013-y000	ASM 7 Disk Storage Manager Extended Mode
UTSD020-y000	ASM 7 Volset full
UTSD021-y000	ASM 7 ARS Migrations

LANGUAGES (COBOL 85 is included in Bases)

PQDD001-y000	IQS Relational Option
PQDD002-y000	IQS UPDATE
PQDD003-y000	IQS IDS/II Booster
EXSD007-0000	IQS French language support
FORD001-y000	FORTRAN 77
LGDD003-y000	GPL
CLGD001-y000	C Language
PASD001-y000	PASCAL
LGDD004-y000	MACPROC

NETWORK SOFTWARE

CNSD010-y000	OPEN LAN ACCESS 7
CNSD009-y000	ISO Session Layer
CNHD006-y000	DPS6 Communications
CNHD007-y000	COMMUNICATION package
UFTD001-y000	UFT Unified File Transfer
DISD001-y000	DJP Distributed Job Processing
CNHD008-y000	AUPI7 Admin.Utility Prog.Interf
CNSD032-0000	Pack DNS-E for DPS7000/TA
CNSD033-0000	DNS-E/LE Pack for DPS 7000/XTA
CNSD033-S0CE	MainWay 2600LE&DNS-E/LE Documentation

DOF7

DISD007-y000	DOF7- Package
DISD002-y000	DOF7-MC Multi-console
DISD003-y000	DOF7-RM Remote & Multiplexed
DISD004-y000	DOF7-SM Script Manager
DISD005-y000	DOF7-PO Programmed Operator
DISD006-y000	DOF7-PO Runtime

ORACLE Mandatory Information MI's.

ORAD001-0010	ORACLE Migration V6 to V7
ORAD027-y030	Upgrade V7 from "y0" old group to new group
ORAD027-003D	V7 Upgrade 32-named-user to full license

ORACLE7

u= P if full, =D if 32-named-user license, A if 1 user.

ORAD027-y00u	ORACLE - RDBMS
ORAD028-y00u	ORACLE - Procedural Option
ORAD029-y00u	ORACLE - Distributed Option
ORAD044-y00u	ORACLE - Replication Option
ORAD034-y00u	ORACLE - SQL*Plus
ORAD035-y00u	ORACLE - PRO * C (pre-compiler)
ORAD036-y00u	ORACLE - PRO * COBOL (pre-compiler)

ORAD073-y00u	ORACLE - Parallel Query Option
ORAD074-y000	SQL*Net V2 inet *

SQL*MT REMOTE DATABASE ACCESS *

TPDD020-000A	SQL*MT for ORACLE7
TPDD021-000A	SQL*MT for XA option
TPDD047-0000	SQL*MT for SQL server

Open environment products

CNSD028-y000	OPEN-GTWRITER

JAVA Remote Access *

TPDD032-0000	GCOS 7 JTDS Mgr 1-10 sessions
TPDD033-0000	GCOS 7 JTDS Mgr 11-20 sessions
TPDD034-0000	GCOS 7 JTDS Mgr 21-50 sessions
TPDD035-0000	GCOS 7 JTDS Mgr 51-100 sessions
TPDD036-0000	GCOS 7 JTDS Mgr 101-200 sessions
TPDD037-0000	GCOS 7 JTDS Mgr 201-500 sessions
TPDD038-0000	GCOS 7 JTDS Mgr 501-1000 sessions
TPDD039-0000	GCOS 7 JTDS Mgr 1001-1500 sessions
TPDD040-0000	JTDS server remote Java class

DATA ACCESS 7 *

DMDD001-000A	GCOS7 Distributed Data Manager 1-8 users
DMDD001-000B	GCOS7 Distributed Data Manager 9-16 users
DMDD001-000C	GCOS7 Distributed Data Manager 17-32 users
DMDD001-000D	GCOS7 Distributed Data Manager over 32 users
DMDD002-0000	GCOS7 UFAS Relational Server
DMDD003-0000	GCOS7 IDS/II Relational Server
DMDD004-0000	GCOS7 Distributed Data Manager Batch Option
ADDD025-0000	DA7-NT SERVER GWAY
ADDD026-0000	DA7-ODBC DRIVER FOR NT SERVER
ADDD027-0000	DA7-UNIX SERVER GWAY
ADDD028-0000	DA7-ODBC DRIVER FOR UNIX SERVER
ADDD018-000A	DA7-PC Gway 1 PC
ADDD019-000A	DA7-ODBC Driver 1 PC
ADDD018-000B	DA7-PC Gway 10 PCs
ADDD019-000B	DA7-ODBC Driver 10 PCs
ADDD018-000C	DA7-PC Gway 50 PCs
ADDD019-000C	DA7-ODBC Driver 50 PCs

ESP 7 *

ADDD010-000C	ESP for GCOS 7 - 50 ports
ADDD010-000D	ESP for GCOS 7 - 51 to 100 ports
ADDD010-000E	ESP for GCOS 7 - 101 to 200 ports
ADDD020-0000	ESP for GCOS 7 - 201 to 500 ports

ADDD021-0000	ESP for GCOS 7 - 501 to 1000 ports
ADDD022-0000	ESP for GCOS 7 - 1001 to 1500 ports
ADDD023-000A	ESP 7 - PC Gway 1 PC
ADDD023-000B	ESP 7 - PC Gway 10 PCs
ADDD023-000C	ESP 7 - PC Gway 50 PCs
ADDD023-000F	ESP 7 - PC Gway 100 PCs
ADDD023-000G	ESP 7 - PC Gway 500 PCs
ADDD024-0000	ESP 7 – NT Server Gway

COOPERATIVE TP	
TCPD002-0000	/HOST7 GCOS7 RT
TCPD003-y000	Reverse /HOST7 API GCOS7
TCPD004-PA0B	Lic. Reverse /HOST7 Tuxedo Agent base
TCPD004-PABA	Lic. Reverse /HOST7 Tuxedo Agent base Incr.
TCPD004-SPCE	Lic. Reverse /HOST7 Tuxedo Agent base M+D

IMS7 R3		
ACM0114	IMS 7 Entry level package	(IMSY001)
ACM0124	IMS 7 Just.in time . KANBAN	(IMSY011)
ACM0125	IMS 7 Purchasing management	(IMSY012)
ACM0126	IMS 7 Statistical forecast	(IMSY013)
ACM0130	IMS 7 CAD interface	(IMSY015)
ACM0122	IMS 7 Capacity requirement planning	(IMSY009)
ACM0123	IMS 7 Job sequencing (Parsifal)	(IMSY010)
ACM0115	IMS 7 High level package	(IMSY002)
ACM0116	IMS 7 Customization	(IMSY003)
ACM0117	IMS 7 Inventory management	(IMSY004)
ACM0129	IMS 7 Program I/F control (PIC)	(IMSY014)
ACM0118	IMS 7 Tech. data management	(IMSY005)
ACM0120	IMS 7 Options and variants mgt	(IMSY007)
ACM0119	IMS 7 Standard costs calculation	(IMSY006)
ACM0121	IMS 7 Material requirement planning	(IMSY008)

*** For all these MIs where Open 7 was a prerequisite, only the ISI 7 MEDD002 media is now pre-requisite (CD-ROM + Cartridge).**

7 Documentation for GCOS 7-V10 TS 9870

The following manuals have been or will be updated to reflect the changes brought by GCOS 7-V10 TS 9870

TITLE	Reference		TS 9870
GCOS7 System Overview	47 A2 22UG	Rev. 00	
CTL Unix Server User's Guide	47 A2 63UU	Rev. 04	←Rev.05
NETWORK Generation User's Guide	47 A2 93UC	Rev. 02	←Rev.03
NETWORK Overview and Concepts	47 A2 92UC	Rev. 01	←Rev.02
FCP7 NETWORK User's Guide	47 A2 94UC	Rev. 02	←Rev.04
FCP7 NETWORK system messages and reason codes	47 A2 29EB	Rev. 00	←Rev.01
GCOS 7 System Installation Configuration and Updating Guide	47 A2 23US	Rev. 02	←Rev.03
System Operator's Guide	47 A2 53US	Rev. 03	←Rev.04
UFAS Extended User's Guide	47 A2 04UF	Rev. 05	
TDS Administrator's Guide	47 A2 32UT	Rev. 07	
TDS C Programmer's Manual	47 A2 07UT	Rev. 04	
TDS Cobol Programmer's Guide	47 A2 33UT	Rev. 06	
DATA Security Facilities	47 A2 09UF	Rev. 02	
IOF Terminal User's Reference Manual Part 2	47 A2 39UJ	Rev. 06	
INTEROP7User's Guide	47 A2 91US		Rev. 00
V7000 Operator's Guide	47 A2 74US		Rev. 00
DA 7 (NGEN) on TCP/IP for XTA	47 A2 89US		Rev. 01
ESP 7 (NGEN) on TCP/IP for XTA	47 A2 92US		Rev. 00
JESP7	47 A2 93US		Rev. 00

Note that these manuals ARE NOT part of the Technical Status kit. If you have a subscription, you will get them through the normal subscription conditions. They are also delivered when the corresponding products are ordered.

8 GCOS 7-V10 TS 9870 system environment

8.1 TECHNICAL STATUSES GCOS 7-V8 /-V9 /V10 SUPPORTED

TS 8560 UP30 **Supported up to December 31st, 2000**
TS 9662 UP30 **Supported up to September 30st, 2001**
TS 9764 UP20 **Supported**
TS 9866 UP20 **supported**
TS 9870 UP10 **supported on DPS 7000/XTA models**

8.2 TECHNICAL STATUSES FOR FIRMWARE AND OLTD

The FIRMWARE and OLTD Technical Statuses running on a system disk can be displayed under IOF (not the main operator), using the following commands:

S: **GIUF COMMAND=DISPLAY_STATUS**

The values given in the table below are the minimum Technical Statuses required by GCOS 7-V10 TS 9870.

GCOS 7	DPS 7000 MODELS	FW RELEASES
V9	DPS 7000/4x5 or DPS 7000/Cx0	N1 – 181
	DPS 7000/MT11/MT21/MT31	N1 – 181
	DPS 7000/8xx or DPS 7000/Dx0/Mx0	P2 – 061
	DPS 7000/MTxx with xx >= 41	P2 – 061
	DPS 7000/TAxxx or TAxxxC	P2 – 061
V10	DPS 7000/XTAxx	D1 – 011

8.3 TECHNICAL STATUS OF GSF

The value given in the table below is the Technical Status recommended by GCOS 7-V9 TS 9866 UP20 and GCOS 7-V10. There are patches for Software Telecontrol version running on DPS7000/XTA ,a level from the Minimal Bootstrap Disk is necessary if GSF 122 is installed from tape media .The GSF Technical Status running on a system disk can be displayed under IOF, using the following command:

S: **GIUF COMMAND=DISPLAY_STATUS**

	DPS 7000 MODELS	**GCOS 7-V9/V10**
GSF	**Any model**	**122 then 124**

8.4 TECHNICAL STATUSES FOR VCP7 ,FCP7, MainWay 2000

8.4.1 VCP7

The various telecommunication Technical Statuses running on a system disk can be displayed under IOF (not the main operator), using the following command:

S: **DIUF LIST**

The minimum Technical Status recommended for DNS, CNS and FCP7 are listed below (for standard marketing configurations in case of network with DPS7000/non XTA and DPS7000/XTA connections).

	DPS 7000 MODELS	**GCOS 7-V9/V10**
FCP7	**DPS 7000/4x5/8xx** **DPS 7000/Cx0/Dx0/Mx0** **DPS 7000/MTxx** **DPS 7000/TAxxx/TAxxxC**	**N215**
VCP7	**DPS7000/XTAxx**	A MainWay Communication Processor is connected to the DPS 7000/XTA platforms in different ways: - Either directly from a 32 bit PCI 10/100 Mbps Ethernet Adapter to the MainWay Host access port with a RJ45/RJ45 cable. - Or through a Smart Hub or Switch connected to a DPS 7000/XTA 32 bit PCI 10/100 Mbps Ethernet Adapter with a RJ45/RJ45 cable.

8.4.2 MainWay 2000

The minimum Technical Status recommended for DNS-E is “V3U3” (Mandatory for TDS-Web support).

8.4.3 Products belonging to INTEROP7 media .

TAPES/CD DIANE	RUNNING ON	ID144
INTEROP7_BASIC	***PRODUCT***	***1.5.3***
SOCKG7_STD	**on W2000**	**1.2.0**
CNDSA	**on W2000**	**2.0**
ISID	**on W2000**	1.4 New install
ISI7	**On GCOS 7**	**1.4.4**
SOCKG7_API	**On GCOS 7**	**1.2.0**
SRVCAM	**On GCOS 7**	**2.0** Interface vcam
SUBUX	**On GCOS 7**	1.1.0
IAM_SRV	**on W2000**	
NT7GW	**on W2000**	1.4.4
IAM_SNAP	**on W2000**	
GXRPC_API	**On GCOS 7**	103.1.1
FTP7	***PRODUCT***	***1.5.3***
FTPClient	**on W2000**	
FTPServeur	**on W2000**	
SRVFTP	**On GCOS 7**	1.5.3
E_FTP	**On GCOS 7**	
OPENGTW	***PRODUCT***	***1.3.3***
OPENGTW	**on W2000**	
SRVGTW	**On GCOS 7**	**1.3.3**
TDS_TCP/IP	PRODUCT	1.4.0
SOCKG7_TDS	**on W2000**	1.2.0
TDS_TCP_APIX	On UNIX	1.4.1
TDS_TCP_API	**on W2000**	non
ORACLE7	***PRODUCT***	***7340A 8***
ORACLE7	**On GCOS 7**	
SA7	**PRODUCT**	**3.6.1**
SA7	**On GCOS 7**	
UM-SA7	**PRODUCT**	**non**
AM7_API	**On GCOS 7**	
CLX	**PRODUCT**	**4.2.1**
SSI	**On UNIX**	
CLX	**On GCOS 7**	
ESP7	**PRODUCT**	**1.4.0**
ESP7NGEN	**on W2000**	7.3.0
DA7	**PRODUCT**	**1.5.0**
DA7 UNIX		
DA7NGEN	**on W2000**	8.0.0
SQL7	**On GCOS 7**	32.01.2
SNMP7	PRODUCT	4.1.0
SNMP7	**On GCOS 7**	
CMA SQL	**PRODUCT**	
Cmagen		
JAVA7	**PRODUCT**	**N.A**
JTDS	**PRODUCT**	**1.2.0**
TNVIP7	**PRODUCT**	

8.5 INTEROPERABILITY PRODUCTS ASSOCIATED TO TDS

Interop7	**Minimum technical level**
TDS TCP/IP 2 tiers on Windows™	Atmi32.dll 3.0.8 or Atmi32/dll 4.1
TDS TCP/IP 3 tiers on Windows™	Atmi32.dll 3.1.0 or Atmi32/dll 4.1
TDS TCP/IP 3 tiers on UNIX	Xatmi 1.3
TDS XA on Windows™	Atmi32.dll 4.1 Xatds.dll 1.1

8.6 SOFTWARE PACKAGES

Check with the providing Software Houses :
* if the versions of the software packages that you are using need to be updated in order to run correctly with GCOS 7-V10 TS 9870 Release

- and, if new keys need to be validated because the CPU number has changed.

9 Annex:

9.1 H_NUCLEUS SERS CORRESPONDENCE

In the following table, updated October 18, 2001, each column is associated to a GCOS 7 Technical Status, each line gives the corresponding SERs. A line cell value to spaces means that the SER is included in source (“cleaned SER”).

TS 8560 UP30	*TS 9662 UP30*	*TS 9764 UP20*	*TS 9866 UP20*	*TS 9870 UP10*
P4306.01				
P3232.01				
P3975.01				
P3442.01				
P2336.02				
P3393.02				
P3241.01				
P3362.01				
P3469.01				
P3829.01				
P4004.02 + P4026.01				
P3969.01				
P4061.01				
P4114.01 + P4116.01	P6828.01 (REF)	P7532.01 (REF)		
P4867.01				
P3546.02 + P4881.01				
P6006.01				
P5872.01				
P6059.01				
P6643.01	P6643.01			
P2354.02				
P5019.01				
P5146.01				
P5150.01				
P5444.01				
P5923.02				
P5950.01				
P6038.01				
P6263.01				

TS 8560 UP30	TS 9662 UP30	TS 9764 UP20	TS 9866 UP20	TS 9870 UP10
P6709.03	P6737.03	P8330.01		
P7172.02	P8223.01	P8223.01		
P7430.01	P7430.01	P7430.01 (REF)		
P7433.01	P7433.01	P7433.01 (REF)		
	P7755.01	P7755.01		
		P8770.01		
		P9226.01	P9226.01 (REF)	P9226.01 (REF)
			P9551.01	P9551.01 (REF)
			P9731.01	P9731.01 (REF)
			P9893.01	P9893.01 (REF)
			P9929.01	P9929.01 (REF)

9.2 AVAILABLE GCOS 7 DOCUMENTATION

39 A1 69DN REV01	DN7500 Operator's Handbook Operator's Guide
39 A2 26DM REV04	OSI/DSA Network System Messages and Return Codes
39 A2 32DN REV01	CNS 7-A2 NGL Reference Manual
39 A2 33DN REV01	CNS 7-A2 Terminal Management
39 A2 34DN REV01	CNS 7-A2 NOI Operator's Guide
39 A2 35DN REV01	CNS 7-A2 IN/ON Line Tests
39 A2 40DM REV01	CNBS 7-A1 NGL Reference Manual
39 A2 41DM REV01	CNBS 7-A1 NOI Reference Manual
39 A2 42DM REV01	CNBS 7-A1 Documentation Directory
39 A2 43DM REV01	CNBS 7-A1 Terminal Management Reference Manual
39 A2 44DM REV02	CNBS 7-A1 IN/ON Line Tests
39 A2 46DM REV03	Simple Generation Guide Using FPG7
39 A2 90DP REV00	AUPI Implementation Manual Vol1
39 A2 91DP REV00	AUPI Implementation Manual Vol2
39 A2 93DM REV03	CNS 7 A1 Software Release Bulletin
39 A2 9693 REV06	DSA Log File Messages
39 A2 9799 REV01	DNS C System Operation
39 A4 15DM REV03	DATANET Overview
39 A4 30DN REV00	CNS 7-A2 Documentation Directory
39 F1 69DN REV01	DN7500 Manuel d'Exploitation
39 F2 32DN REV01	CNS 7-A2 Manuel de Référence NGL
39 F2 46DM REV03	FPG7 Guide de Génération Simplifiée
40 A4 61CF REV01	GCOS 7 Overview
40 F4 61CF REV01	GCOS 7 Présentation Générale
47 A1 65UU REV01	CMTS Operator's Guide
47 A2 00UU REV01	PRUGD00XGuide de l'Utilisateur
47 A2 01UP REV03	Library Maintenance Reference Manual
47 A2 02UP REV01	Library Maintenance User's Guide
47 A2 03US REV07	System Behavior Reporter User's Guide
47 A2 04UF REV05	**UFAS-EXTENDED User's Guide**
47 A2 04UL REV04	System Call from COBOL
47 A2 04US REV05	T.I.L.S. User's Guide
47 A2 05UD B REV01	Full IDS/II Reference Manual Vol. 1

47 A2 05UL REV04	COBOL85 Reference Manual
47 A2 05UP REV01	Text Editor User's Guide
47 A2 06UD B REV00	Full IDS/II Reference Manual Vol. 2
47 A2 06UL REV05	COBOL85 User's Guide
47 A2 06UP REV01	Full Screen Editor User's Guide
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47 A2 62UC REV02	VCAM-ISO User's Guide
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